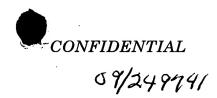09/249741

FLEXIBLE ARCHITECTURE FOR IMAGE PROCESSING

ABSTRACT OF THE DISCLOSURE

A system and a method for processing image data in a digital image

5   device such as a digital camera. The present invention includes a bus, a

central processing unit coupled to the bus, an image processing subsystem

coupled to the central processing unit for processing the image data using a

particular processing mode, a memory unit coupled to the bus, and a data

storage element for storing the image data after image processing. The

10   memory unit has stored therein an operating system for managing the

image processing subsystem, and the memory unit also has a data

structure for managing the image data for the image processing subsystem

during image processing. The data structure provides an interface

between the operating system and the image processing subsystem, such

15   that the operating system is independent of the processing mode used by the

image processing subsystem.